

## BACKGROUND DOCUMENT

### Methodology<sup>1</sup>

#### I. Introduction

The Global Gender and Environment Outlook (GGEO) occupies a unique space at the intersection of foundational environmental frameworks such as DPSIR and foundational gender-lens frameworks.<sup>1</sup> The GGEO project will be the first large scale global environmental assessment to combine these approaches. Bringing gender perspectives to bear on environmental frameworks is *not* a matter of ‘add women and stir.’ Rather, gender analysis actually changes the frameworks themselves. Approaching environmental understanding through a gender lens demands new and different questions, emphasizes different dimensions of human-environment relationships, and requires different methodological tools and approaches.

At the heart of environmental gender analysis is curiosity about whether men and women (boys and girls) experience “the environment” differently; about whether they have different needs, encounters, vulnerability, and resilience. This necessitates a core curiosity about gender equality and inequality – how inequalities are created, perpetuated, and sometimes effectively challenged and changed.

Socially-constructed gender roles often create differences in the ways men and women act in relation to the environment, and in the ways men and women are enabled or prevented from acting as agents of environmental change. For example, simple gender-based divisions of labour can affect how women and men experience and know different elements of the environment: if only men fish in the open sea and only women fish in the coastal mangroves, if only men herd livestock in the highlands and only women grow root crops in the valleys, if many men drive to work in a personal car and most women take public transportation, they will inevitably have different sets of environmental knowledge and experiences. They will have different vantage points (perhaps literally) from which they see the environment and changes in the environment.

This different environmental positioning may mean that men and women have exposures to very different environmental problems and risks, along with different perspectives on the degree of seriousness of environmental problems and on appropriate interventions, adaptations and solutions. Further, because of the social construction of gender roles, men and women may have different – usually unequal – capacities and approaches to act as agents of environmental interpretation and change.

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To push one step deeper than “gender roles,” we can also observe that social norms of masculinity and femininity are environmental factors. Gender-based divisions of labour, such as those described above, don’t just derive from rational economic assessments about labour efficiency. They are usually the result of socially constructed norms about what it means to be manly or womanly. If it is deemed unmanly to collect water or to raise poultry, or if it violates norms of appropriate femininity for women to ride bicycles or to herd cattle, these are socio-economic identities that are *also* environmentally relevant. If women are not allowed to attend public mixed-sex meetings, or if only men are allowed to preside over public meetings, this means that men and women have unequal capacities to participate in decisions about environmental interventions, change, and solutions.

Human relationships with environments work both ways, and just as social forces exert pressure on environments, environmental conditions and changes in those conditions can shape gender relationships. Thus a gendered approach to environmental assessment also examines, conversely, the ways in which environments and environmental relationships shape, create, and sustain gender norms. What are the social costs and consequences of these differential gendered environmental relationships? What is the dynamic relationship between environmental conditions and changes and gender inequality? The impacts of acute environmental change, especially disasters, for example, are almost always gender-differentiated in the short term, and in the long term often rearrange gender roles and relationships. Reconstruction following disaster is both social and physical. Gender inequalities are often altered, sometimes for better or sometimes for worse, in post-disaster social reconstruction and rebound.

**II. Asking different questions, using different tools: Unique methodological approaches and contributions of GGEO**

The GGEO will not generate new data on the environment. GGEO starts with existing environmental information. However, from that base it expands the circle of what is defined as environmental information, it shifts the foundational questions we ask, and it brings in new analytical perspectives, including reframing the basic set of questions we ask. Conventional approaches to environmental analysis typically *hide* gender realities by (1) using undifferentiated social categories and (2) by starting with a false assumption of sameness in “human” relations to environments, including as agents of change. Gender and environment relationship analysis thus requires a new approach.

**Foundational questions:**

The UNEP-GEO framework of *integrated* environmental assessment (IEA), widely deployed across UNEP assessments, is built around five foundational questions<sup>ii</sup>. The GGEO starts with a gendered version of this IEA:

Integrated environmental assessment: GEO foundational questions	GGEO version
1 What is happening to the environment and why?	1. What social forces are producing the changes we see in the environment and why? Are those social forces ‘gendered’?
2. What are the consequences for the environment and humanity?	2. What are the ecological changes produced, and what are the consequences for social systems and human security? In what ways are

	those consequences gender-differentiated? What are the larger social consequences of gender-differentiated impacts?
3. What is being done and how effective is it?	3. Who are the actors involved in responding (at many levels) and are men and women equally engaged? Equally effectively engaged? Are there gender differences in weighing what 'should' be done and in weighing the effectiveness of possible actions and solutions?
4. Where are we heading?	4. Where are we heading and will there be different outcomes for women and men? Are there gender-differentiated perceptions of where we're heading?
5. What actions could be taken for a more sustainable future?	5. What actions could be taken for a more sustainable future that will position men and women as equal agents in taking such actions? What socio-economic factors will shape different outcomes and responses for men and women?

**Analytical foundations of a GGEO methodology:** To develop a fresh methodological – gendered – approach to GEO necessitates several analytical shifts:

**a) Taking a human-centric analytical approach:** The first conceptual ‘flip’ that is required for gendered environmental analysis is to put people first: redefining environmental relationships through the lens of social relationships, and in the context of human economic activities, rather than defining the environment primarily in its physical forms. This also implies expanding the expert structure: the insights and expertise of social scientists must be brought to the table, as well as experts from the physical sciences.

**b) Drawing on a diverse mix of sources of information:** One of the key methodological contributions of gender analysis is the recognition that information about lived realities comes in many forms.

Gendered environmental analysis takes seriously qualitative forms of knowing such as “experience” and “perception.” This does not diminish the role of “facts,” nor does it position personal subjectivity above “scientific objectivity.” Rather, gender analysis methodologically recognizes the value of *both* quantitative data and qualitative, and gives close attention to the role of perceptions and interpretations. Quantitative information is necessary but not sufficient. It doesn’t capture “experience,” nor can it capture most aspects of “empowerment.” Given the lack of gender-specific quantitative data in the realm of environmental assessment, qualitative understanding looms even larger.

**c) Combining macro and micro data:** The virtues of small-scale environmental data are well known. As the 2009 UNDESA Expert Group on gender-disaggregated water data affirmed, the smaller scale often provides the most appropriate and fruitful information<sup>iii</sup>. Local data provide the basis of most of the knowledge that we have on gender in environment. Given the lack of gender-disaggregated global-level

environmental data, GGEO will include, perhaps even predominantly, regional and local-scale information.

**d) *Incorporating the social construction of knowledge:*** Control over the production and consumption of knowledge matters a great deal. In conventional environmental analysis, the privileged producers of environmental knowledge are male scientists who produce “facts” about physical environments. Shifting the boundaries of environmental assessment to include qualitative and quantitative information, “measurable” as well as “lived-world” knowledge, widens the circle of presumed expertise. The inclusion of different ‘ways of knowing’ has been broached in previous GEOs, primarily through recognition of indigenous perspectives and traditional knowledge.

Responses to environmental problems don’t follow a straight line from facts about the environment. Among other social forces, perceptions intervene.

The Community of Practice (CoP) process integrated into the GGEO process will generate information, perhaps much of it qualitative, as well as provide a vehicle for sharing gendered environmental experiences and knowledge.

**e) *‘Lifting the roof off the household’:*** There is no “household” food security, income, literacy, or institution. All available evidence makes clear that *within* a household, resources use, priorities, and decisions are negotiated (or imposed) across gender divides. “Household”-based environmentally-relevant decisions and behaviours are negotiated, often unequally, between men and women *inside* households – whether on matters such as water use, divisions of labour, energy-source choices, or financial allocations for agricultural adaptation. Intra-household dynamics are critically important in terms of resources, resources use, conservation, consumption, and the ways in which men and women (may) act as agents of change. All environmentally-consequential decisions that are made within households are filtered through gender norms and roles.

**f) *Implications for policy:*** Asking gendered questions ‘on the ground’ provides the basis for a more comprehensive, 360° view of environmental issues – and, in consequence, for more effective policies. For example, currently in the United States, government policy on climate change is hindered by a high degree of public skepticism about climate change. But, in fact, there is not a ‘population-wide’ American skepticism: a recent Gallup poll study revealed that among the most confirmed climate change skeptics showed twice as many women were concerned about climate change than men.<sup>2</sup> Understanding this division can contribute to critical strategies for developing effective climate policies and building constituency support for them.

Just as gendered information flows upstream to inform policy, so it is that gender-sensitive policies can have enormous consequences on the ground. Most mainstream environmental policies, currently, do not incorporate the concerns or insights of gender analysis. To this extent, they are partial policies, not fully serving environmental or social interests to the greatest effect.

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<sup>2</sup> Gallup Poll, Concerned skeptics. Gallup April 22, 2014 <http://www.gallup.com/poll/168620/one-four-solidly-skeptical-global-warming.aspx>

### III. Methodological Framework

A comprehensive gender-environment analytical framework does not exist as an off-the-shelf product. One of the major contributions of GGEO is in developing and using a unique hybrid gender-environmental methodological framework.

Throughout its recent GEO publications, UNEP deploys a **DPSIR** framework:

**Driving forces-Pressure-State-Impact-Response (See Annex 1).**

In 2000, WHO developed a more health-sensitive variant on DPSIR, dubbed **DPSEEA**<sup>iv</sup>:

**Drivers-Pressure-State -Exposure-Effect-Action (See Annex 2)**

The Africa Environmental Outlook-3 adopted DPSEEA<sup>v</sup>. From a human-centered and health-centered approach, the most striking change with DPSEEA is to introduce the notion of “exposures” (to risks).

DPSEEA also has features that work particularly well for a gendered environmental analysis, particularly:

- Broadening the concept of “impact” to also invoke “effect.” The notion of “impact” tends to connote a physically sharp discrete action. “Effects,” on the other hand embrace both sharp, single events *or* long-term and chronic occurrences that are not bounded by time or space. The difference might be understood in this way: one of the impacts of the SouthEast Asia tsunami in 2004 was the destruction of entire villages; one of the lasting effects is that several thousand people throughout the region, a decade later, are still housed in “temporary” shelters. Or, the “impact” of a drought might be a sharp drop in the income derived from agriculture in the drought zone; increases in domestic violence in drought regions is an effect of the increased social stress and diminished capacity of men to provide for their families.
- In DPSEEA, the Actions (responses) are interlinked and reciprocal along each part of the chain.
- Through the interlinkages, the DPSEEA model reinforces the understanding that one of the principal aims of “action” is to reduce the magnitude of the driving forces. This is an important dynamic in any model of social movement to mitigate gender inequality; gender analysis *and* action almost always return to the drivers of inequality. “Actions” rather than “responses” also connote more intentional and formulated activity. “Response” sometimes connotes a passive consequence. In the GEO-5 DPSIR framework, responses occupy a central position between drivers and impacts, but are not directly causally linked to either.

The **GGEO methodological model** (see Figure 1, below) show the analytical flow among:

Drivers-Pressures-State-Impacts -Response/Policies, which are mediated through Knowledge/Perceptions including traditional/indigenous knowledge.

This is a hybrid GGEO methodological model, taking the best of both:

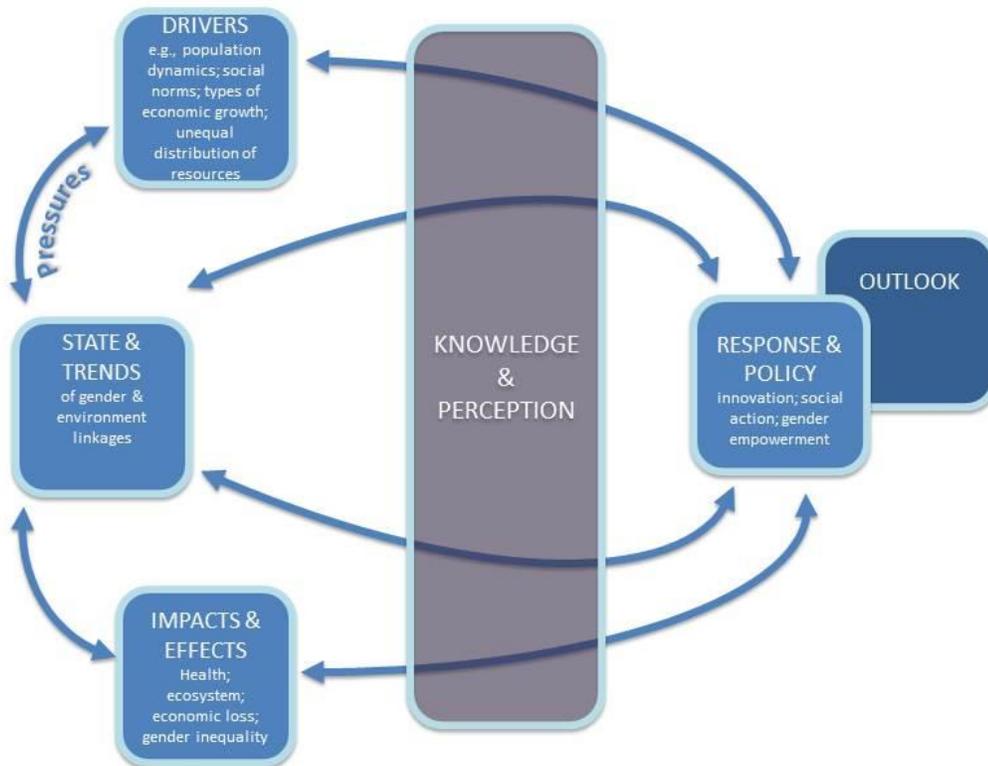
- Adding the more nuanced notion of “effect” from DPSEEA to the DPSIR concept of “impact”
- Expanding the DPSIR “response” by including the DPSEEA “action”
- Linking “action” back to all points along the chain, and especially to “drivers”
- Including a crucial added feature that centrally positions “knowledge” and “perception;” From a gender perspective, the production and access to knowledge, and the perceptions that derive

from both gender and environmental social positioning are strong mediating influences in all environmental domains.

As GGEO is developed and authored, each of the framework components will need to be made gender-sensitive. Thus, for example, among the “drivers,” GGEO will include “social norms of masculinity/femininity.” The driver conventionally viewed as “demographics” will be unpacked in terms of the ways in which gender inequalities *themselves* drive demographic forces. Changes in “security” as an impact will be disaggregated to reveal gendered aspects of human security in changing environments.

Gender-sensitive perspectives will be infused throughout the content of each of the GGEO chapters.

Figure 1: GGEO METHODOLOGICAL MODEL



## Provisional content and outline

### I. Overall approach of GGEO

Based on the discussions of the high-level meetings of the Network of Women Ministers and Leaders for Environment in 2012, 2013 and in Rio+, and the findings of Expert Consultation Meeting in February 2014, the GGEO's scope and approach will address the following needs that were expressed by governments regarding *a gender and environment outlook that would use social science information as well as gender sensitive indicators to review gender environment links and guide policy actions towards gender equality* (GC Decision 27/11, preamble).

- Embracing an integrated approach that mainstreams traditional environmental assessment in the economic/social sectors;
- Using GEO's DPSIR analytical framework is the foundation of a suitable adopted framework;
- Being useful for policy-makers at country-level. The analysis, therefore, should follow a structure and language of relevant sectors or areas that are easy to adapt by policy-makers. This integration approach will benefit governments to see the links between environment, gender and economic sectors;
- Focus on solutions, therefore highlight the roles of men and women as agent of change; highlighting the costs of not addressing gender inequality in natural resource management and environment management where possible;
- Supporting sustainable development framework such as green-economy, sustainable consumption and production;

### II. Proposed outline of GGEO

#### A. Introduction

##### 1. Why Gender and Environment?

- a. Gender, gender equality and gender empowerment
- b. The links of gender and environment in sustainable development

##### 2. What drives gender inequality?

- a. Social norms
- b. Unequal rights and opportunities
- c. Poverty
- d. Conflicts, violence & militarization
- e. Environmental degradation and resource depletion

#### B. State, trends, impacts of gender-environment nexus in a development context

1. Sustainable Energy and Climate Change Mitigation
2. Climate Change Adaptation and Disaster Risk Reduction
3. Sustainable Land Management
4. Water and Sanitation
5. Biodiversity

6. Oceans and coastal zone management
7. Environmental Health and Chemicals
8. Human settlement and urban development
9. Life-style and sustainable consumption

#### **C. Outlook**

1. Equal rights to sustainable livelihoods
2. Body of knowledge and closing the data gaps
3. Technology and innovations
4. Peace building and security

#### **D. Policy framework**

1. Economic tools, methodologies and mechanisms: gender responsiveness
2. International enabling environment (e.g. MEAs and SDGs): enhancing gender sensitivity
3. Integrated resource management policies: mainstreaming gender
4. Knowledge management and education: addressing data gaps and awareness raising

## **Gender disaggregated data and information to support GGEO assessment**

### **I. Introduction**

Environmental indicators are a measure of the environmental and ecosystem quality and of changes in this quality. Indicators are used in environmental assessments to measure the impact on the environment of human intervention and to quantify changes due to management and programmes.

Gender-sensitive indicators are developed based on gender-disaggregated data. The data can be either sex-disaggregated data (this is quantitative data giving information about differences between men and women) or qualitative data to inform on aspects of gender differences in a particular sector. Indicators and data are also useful tools to support theories and actions in politics and development strategies. Gender disaggregated data are becoming more frequent.

### **II. Gender-disaggregated data scarcity**

A study that examined the availability and gaps of gender-disaggregated in 13 environmental thematic areas and economic sectors was conducted. The result showed that despite the fact that the importance of gender is known, the majority of environmental data sources are not gender disaggregated. The coverage of gender disaggregated data is variable both in terms of geographical area and of subject area. There are only few gender disaggregated data and indicators that can be aggregated to regional and global level. Thus the issues of scarcity of gender-disaggregated data will be a key challenge for the assessment process.

### **III. Data standardisation**

Where gender-disaggregated data are collected at national or international level, often they are not with the same standardisation. For examples, household surveys are not standardised across countries; even in the same countries data from different agencies might suffer from discrepancies, data from national reporting under environmental conventions. This represents another challenge to enhancing gender-disaggregated environmental data sharing and aggregation at regional and global.

### **IV. Non-peer reviewed information**

Qualitative information in forms of case studies, collected good practices and traditional knowledge will be utilized in the assessment in order to supplement the challenges regarding the gaps of gender disaggregated data at regional and global level.

### **V. Working through partnerships**

The GGEO assessment process will not collect primary data but seek to utilise and benefit from the large pool of existing body of knowledge on gender and environment that are housed in other UN agencies, international organisation, multilateral environmental agreements and civil society groups.

### **VI. Use of open-access environmental databases and information portal**

The GGEO assessment will make use of open data sources on environment and gender such as UNEP's Environmental Data Explore (EDE), UNEP Live, World Bank Data, Europe Stat, OECD Statistic, UN Data.

## Production and workplan

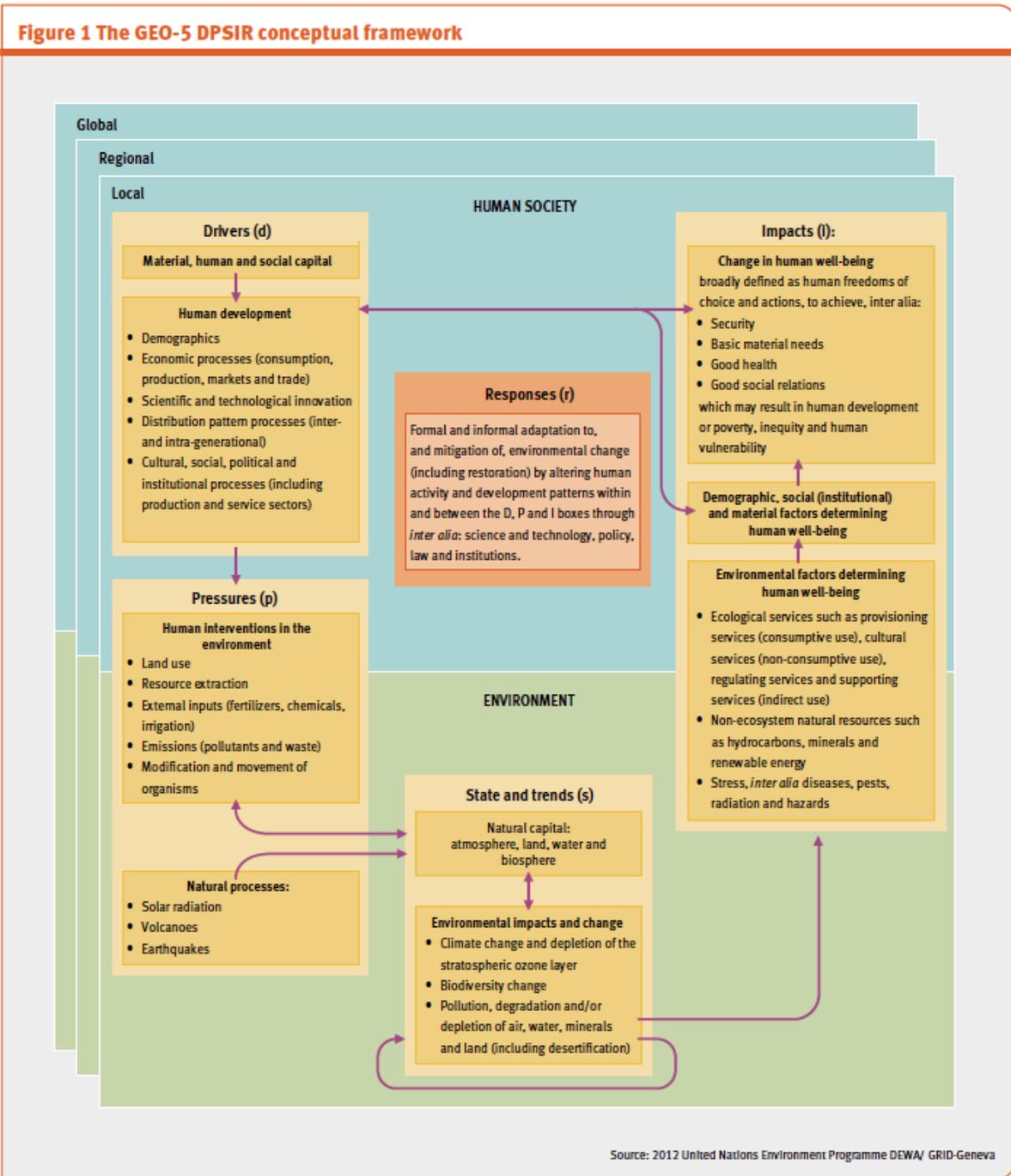
### GGEO Products

The production of the GGEO will be in forms of Print format (with only a limited print run) and an e-book. Other outreach products may include posters and a short documentary, pending technical and financial availability. All products will be available on UNEP Live.

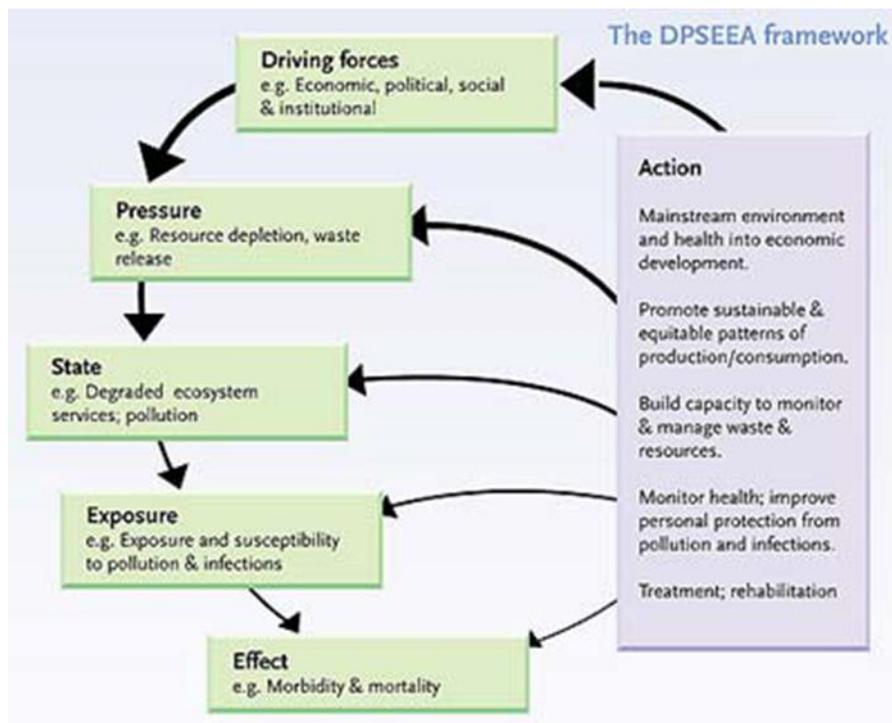
### Workplan

	2014			2015												2016									
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
Multistakeholder Consultation																									
Expert group organisation																									
GGEO CoP	Information sharing, discussions and feedback/outreach																								
Regional consultations						BTB with GEO6																			
Author meeting 1				Drafting content (State, trends, impacts)																					
Author meeting 2										Drafting and revising (Outlook and Policy framework)															
Peer review						State-trends-impacts review							Full report review												
GGEO report																		Production							
GGEO SPM																		Production							
E-book																									
Documentary film																Pending funds									
Translation																				Translation					
Launch of report																				@UNEA2					
Other outreach activities																				Posters, distributions					

## ANNEX 1: DPSIR Model (GEO-5)



## ANNEX 2: DPSEEA (AEO-3)



<sup>i</sup> Well-established gender-lens methodological frameworks include the “Harvard framework,” the “Moser framework,” and the Longwe women’s empowerment framework.

<sup>ii</sup> As described in: Jill Jager et al. *IEA Training Manual: A training manual on integrated environmental assessment and reporting. Module #1, The GEO approach to integrated environmental assessment*. Nairobi & Winnipeg: UNEP/IISD, 2008. UNEP. *Methodology for the preparation of GEO-Cities Reports, Training Manual Version 3*. 2009

<sup>iii</sup> UN-DESA (editors, Seager, Joni, Kenza Robinson, Charlotte van der Schaaf, Sascha Gabizon). *Gender-Disaggregated Data on Water & Sanitation*. NY: United Nations Department for Economic and Social Affairs, 2009.

<sup>iv</sup> Corvalán C, Briggs D, Zielhuis G., eds. *Decision-making in environmental health: from evidence to action*. Geneva, World Health Organization, 2000; see also <http://www.who.int/heli/decisions/barriers/en/>

<sup>v</sup> See *Authors’ Guide: Africa Environment 3*. UNEP 2011. <http://www.grida.no/publications/aeo3/>